| | Application No. | Applicant(s) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| | 09/866,811 | YUKITAKE ET AL. |
| Notice of Allowability | Examiner | Art Unit |
| | Richard Lee | 2613 |
| The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGOR (IN 1997) of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED i or other appropriate comm GHTS. This application is | n this application. If not included unication will be mailed in due course. THIS |
| 1. This communication is responsive to the amendment filed A | <u> August 12, 2005</u> . | |
| 2. X The allowed claim(s) is/are 12 and 13. | | |
| 3. Acknowledgment is made of a claim for foreign priority un a) All b) Some* c) None of the: | | or (f). |
| 1. Certified copies of the priority documents have | | No. 07/070 046 |
| 2. Certified copies of the priority documents have | | |
| Copies of the certified copies of the priority doc International Bureau (PCT Rule 17.2(a)). | cuments have been receive | ed in this flational stage application from the |
| * Certified copies not received: | | · · |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" on noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give | ENT of this application. tted. Note the attached EX | AMINER'S AMENDMENT or NOTICE OF |
| 5. CORRECTED DRAWINGS (as "replacement sheets") mus | | · |
| (a) including changes required by the Notice of Draftspers | | w (PTO-948) attached |
| 1) hereto or 2) to Paper No./Mail Date | | (|
| (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date Identifying Indicia such as the application number (see 37 CFR 1. | Amendment / Comment o | |
| each sheet. Replacement sheet(s) should be labeled as such in the | | |
| DEPOSIT OF and/or INFORMATION about the depos attached Examiner's comment regarding REQUIREMENT I | | |
| | | • |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892) | 5. ☐ Notice of I | nformal Patent Application (PTO-152) |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948) | | Summary (PTO-413), |
| 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0 | <u> </u> | ./Mail Date s Amendment/Comment |
| Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit | 8. 🗌 Examiner's | s Statement of Reasons for Allowance |
| of Biological Material | 9. | · |
| | | |
| | | |
| | | |

Application/Control Number: 09/866,811 Page 2

Art Unit: 2613

1. The applicants are informed that a typographical error exists in the original U.S. Patent 5,745,182. Specifically, Patent No. "4,864,294" as identified for the Gillard reference on the front page of U.S. Patent 5,745,182 should be Patent No. "4,864,394" instead. The Examiner has indicated the correction to be made as shown in the attachment. No further action is required by the applicants.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (571) 272-7333. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m, with alternate Fridays off.

CANARY EXAMINER

Richard Lee/rl

11/3/05



US005745182A

United States Patent [19]

Yukitake et al.

Patent Number: [11]

5,745,182

Date of Patent: [45]

Apr. 28, 1998

| [54] | METHOD FOR DETERMINING MOTION | | | |
|------|-------------------------------|--|--|--|
| - | COMPENSATION | | | |

[75] Inventors: Takeshi Yukitake; Shuji Inone, both of

Yokohama, Japan

Assignee: Matsushita Electric Industrial Co.,

Ltd., Osaka, Japan

[21] Appl. No.: 278,010

[56]

[22] Filed: Jul. 20, 1994

Related U.S. Application Data

[62] Division of Ser. No. 970,046, Nov. 2, 1992, Pat. No. 5,369,449.

| [30] Foreign Application Priority Data | | | | |
|----------------------------------------|-----------|--------|---------|-----------------------------|
| | • | | _ | 3-293004 4-181980 |
| [51] | Int. Cl.6 | | | H04N 7/32 |
| [52] | U.S. Cl. | | | |
| [58] | Field of | Search | h | 348/413, 416, |
| | | 34 | 18/699, | 400-402, 407, 409-412, 384, |
| | | | | |

390, 415; 382/232, 236, 238; H04N 7/137

References Cited U.S. PATENT DOCUMENTS

9/1987 Kaneko et al. 348/699 4,691,230 8/1989 Gillard 348/699 4,862,266 9/1989 Gillard . 4,864,294 1/1991 Chantelou et al. .

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

0395271A2 10/1990 European Pat. Off. .

0395440A2 10/1990 European Pat. Off. . 0447068A2 9/1991 European Pat. Off. . 0484140A2 5/1992 European Pat. Off. .

OTHER PUBLICATIONS

A. Puri, et al, "Video Coding with Motion-Compensated Interpolation for CD-ROM Applications", Signal Processing. Image Communication, vol. 2, No. 2, pp. 127-144, Aug. 1990.

K. Kinuhata, et al, "Universal Digital TV Codec —Unicodec", 7th International Conference on Digital Satellite Communications, May 1986, pp. 281-288.

(List continued on next page.)

Primary Examiner—Richard Lee Attorney, Agent, or Firm-Watson Cole Stevens Davis, P.L.L.C.

ABSTRACT [57]

A method for predicting motion compensation for determining of an input image based on a motion vector of the input image from this input image to a reference image which has been sampled at a first set time, and the method includes calculating a motion vector of the input image based on a move, at a second set time, of a block unit which is a part of the input image and consists of a plurality of pixels, and calculating a motion vector of the reference image based on a move, at the first set time, of a block unit which is a part of the reference image and consists of a plurality of pixels. Move compensation of the input image is calculated both from the motion vector of the input image and from the motion vector of the reference image, to thereby realize a method for determining motion compensation with high precision.

3 Claims, 6 Drawing Sheets

